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ABSTRACT

This monograph, one of a series on youth with disabilities and the juvenile justice system, reviews current data on disabilities requiring special education and related supports. Statistics on the prevalence of juvenile crime are followed by statistics on the prevalence of special education disabilities in the system, specifically specific learning disability, emotional disturbance, mental retardation, and attention deficit hyperactivity disorders. For each disability, prevalence figures in the general population are followed by prevalence figures in the correctional system. The monograph finds that youth with cognitive, behavioral, or emotional disabilities are entering the correctional system at rates four to five times greater than their representation in the general population. The paper also notes inconsistencies in identifying and defining disabilities across agencies and differing definitions of disability in research on prevalence rates. A section on identification and service issues notes the need for better prevalence figures to plan administratively for special education needs in the juvenile justice system, research on instruction and

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service delivery for this population, and improved intake and assessment in the correctional system. (Contains approximately 150 references.) (DB)

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YOUTH WITH DISABILITIES IN THE CORRECTIONS SYSTEM:

PREVALENCE RATES AND IDENTIFICATION ISSUES

By

Robert B. Rutherford Jr., Michael Bullis, Cindy Wheeler Anderson, & Heather M. Griller-Clark

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Youth with Disabilities in the Corrections System:

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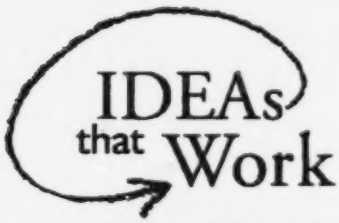

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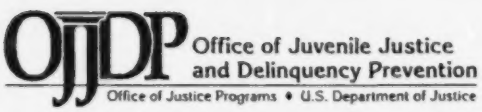

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Youth with Disabilities in the Corrections System:

Prevalence Rates and Identification Issues

Introduction

Despite a rash of recent high-profile crimes committed by youth, criminal behavior for those aged 12 to 17 has actually been steadily decreasing in recent years. Between 1993 and 1997, juvenile violent crime decreased at a faster rate than adult violent crime–33% versus 25% (Snyder & Sickmund, 1999). Despite the decrease in the rate of violent juvenile crime, school safety and violence among youth is reported to be one of the most pressing public concerns (Elam, Rose, & Gallup, 1994).

Although the issue of public safety is paramount, another important concern regarding juveniles who are placed in the correctional system is the way in which they are treated while in that system. Incarceration is an expensive placement alternative (Quay, 1986), with costs for one individual for one year in correctional placement running between $60,000 and $100,000 (Cheney, Hagner, Malloy, Cormier, & Bernstein, 1998). Because these kids will eventually be released into the community, it is both reasonable and necessary to ask how they will be educated to increase their academic, social, and work skills, in the hope that these skills will prevent future criminal behavior and subsequent reincarceration (Garrett, 1985; Kazdin, 1987). This effort is complicated by the fact that a large number of youth placed in the correctional system have disabilities that require specialized instruction and transition planning through special education (Fredericks, 1995).

The purpose of this monograph is to review and describe the nature and prevalence of disabilities among youth detained in this country's correctional system. While the advantages and disadvantages of labeling youth, have been--and in all probability will continue to be--debated for some years to come (e.g., Hobbs, 1975), the fact remains that delivering services to incarcerated minors is predicated upon having the right label. For example, to receive special education services an individual must have a special education disability. Further, due to the interdisciplinary nature of the juvenile correctional system--including education, special education, mental health, and rehabilitation programs--a disability label also is critical for connecting persons with appropriate social service agencies in the community. Special education and mental health terms and categories are not always clearly defined and show overlap, a fact which may act as a barrier to service delivery because the presence of a recognized disability is the "ticket" to receive services (Biller & White, 1989; Bullis & Gaylord-Ross, 1991; Bullis & Walker, 1995).

Research presented here was obtained primarily by a computerized special education/corrections word search of the PsychLit (1968 to April, 1998), ERIC (Educational Resources Information Center) (1982 to March, 1998), and the Criminal Justice (1968 to March, 1998) databases. Also, these authors consulted reference sections of newly identified studies, recently published textbooks, and government documents. Finally, to make sense out of what is admittedly a confusing and disparate subject, the authors relied heavily on their own experiences in this field: operating model demonstration transition programs for youth with criminal records (Bullis, Fredericks, Lehman, Paris, Corbitt, & Johnson, 1994); training teachers to work with youth with disabilities in the justice system (Rutherford, Bryan, & Mathur, 1994; Rutherford, Nelson, & Wolford, 1983); tracking youth from the juvenile correctional system into the community (Bullis, 1993; Rutherford, 1997); and conducting ethnographic studies of youth from the juvenile correctional system who have been successful in their transition into the community (Todis & Bullis, 1995).

Three major special education disability categories will be discussed: specific learning disability, emotional disturbance, and mental retardation. These categories are also the three major special education disability groups represented in the juvenile correctional system (McDaniel, 1992). For each, the authors present current definitions used in special education and in related fields, and summarize data on their prevalence. However, this task was difficult and clear prevalence figures are elusive. The three disability categories are described in the 1997 Amendments to the Individuals with Disabilities Education Act (Public Law 105-17) as are general guidelines for their diagnosis. Each state has the prerogative to use slightly different terminologies for these categories and to interpret the federal identification guidelines somewhat differently. It is conceivable, then, that one individual could have two different special education labels in two different states, or another individual could have a special education label in one state, but not be considered to have that same disability in another state.

Also discussed is Attention Deficit Disorder with and without Hyperactivity (ADD/ADHD), a condition that often exists together with, or "co-morbidly" with, special education categories (McKinney, Montague, & Hocultt, 1993) and is prevalent among youth in correctional settings (Campbell & Wherry, 1986; Farrington, Loeber, & Van Kammen, 1990). Youth with ADD/ADHD may be served in special education programs under the specific learning disability, emotional disturbance, or other health-impaired categories, or they may receive special accommodations in their instruction through regulations presented under Section

504 of the Rehabilitation Act and/or the Americans with Disabilities Act (Maag & Reid, 1994, McKinney *et al.*, 1993). Youth with ADD/ADHD also may carry a psychiatric diagnosis under the Diagnostic and Statistical Manual of the American Psychiatric Association (4th edition) (DSM-IV) (American Psychiatric Association, 1994).

As noted earlier, the labels used in special education differ from those used by the mental health field (i.e., psychology and psychiatry), as presented in DSM-IV, even though there is some overlap in terms (such as ADD/ADHD). The presence of a DSM-IV diagnosis generally denotes some type of emotional disorder, but does not necessarily qualify an individual to receive special education services–even though these conditions are very real and debilitating in other settings. Conversely, a special education label of specific learning disability, emotional disorder, or mental retardation may not qualify an individual to be labeled under a DSM-IV category.

Despite the apparent discrepancy between the labels and terms used between education and these complementary social services, special education disabilities and DSM-IV categories may exist co-morbidly (Cornwall, & Bawden, 1992; Doren, Bullis, & Benz, 1996; Fessler, Rosenberg, & Rosenberg, 1991; Foley & Epstein, 1992; Wagner & Shaver, 1989). This co-morbidity may be explained in large part by the fact that gender, poverty, ethnicity, drug use, and family educational and antisocial characteristics are associated with criminal behaviors, psychiatric diagnoses, and special education disabilities, suggesting a relatively common foundation for all three outcomes (Achenbach, 1985; Kauffman, 1997; Quay, 1986a, 1986b). Further, there are considerable vagaries and subjectivity in both the special education (Hallahan & Kauffman, 1977; Ysseldyke, Thurlow, Graden, Wesson, Algozzine, & Deno, 1983) and mental health (Achenbach, 1985; Quay 1986a, 1986b) assessment and classification processes, which also contribute to confusion regarding this population. This point presents a critical administrative and policy conundrum for future reform and service delivery efforts and will be addressed in many contexts.

To begin, the authors will summarize statistics on crime in this country and important nuances of youth in the juvenile and adult correctional systems. In the second section, we present definitions and descriptions of learning disabilities, emotional disturbance, mental retardation, and ADD/ADHD. We conclude by offering suggestions for improving the assessment and identification process for youth with disabilities in the correctional system.

Awareness of these statistics and acknowledgment of the issues surrounding the identification of disabilities in youth placed in the correctional system, are not enough to serve these individuals effectively. There is considerable work to be done to improve the services offered to youth while they are in custody and during their transition back into their communities. The information presented here is critical for system-level administrative planning, personnel recruitment, and structuring intervention programs for persons with disabilities; and should serve as a foundation for the information and recommendations presented in accompanying monographs in this series on special education and juvenile corrections.

Juvenile Crime Statistics

Since 1990, the number of jail inmates per 100,000 U.S. residents has risen from 163 to 212 (Bureau of Justice Statistics, 1998). At the end of 1996, nearly 2.8% of U.S. adult residents, 5.5 million people, were on probation, in jail or prison, or on parole. By mid -1997, approximately 1.2 million prisoners were housed in state and/or Federal prisons, and local jails held or supervised about 637,000 adults (Bureau of Justice Statistics, 1998). While these figures

are disturbing, the increase in criminal activity and arrests among juveniles is even more unsettling. To understand this situation, we need to know how juveniles, a population including the 12- to 17-year-old age group, are treated by the courts and in the legal system compared with adults, i.e., people who are 18 years old or older.

Crimes committed by juveniles fall into two broad categories. Index crimes, or criminal offenses, are acts that are illegal regardless of an individual's age, and include offenses ranging from theft to first-degree murder. Conversely, a status offense, is an offense that is illegal only when committed by a minor. Examples of status offenses include possession or consumption of alcohol, incorrigibility, truancy, curfew violations, and running away from home. Adjudication as a delinquent results when an individual, who is not legally an adult, commits an act–either an index or status offense--prohibited by law and is found guilty of that offense in a court proceeding. Depending on the crime, a juvenile may be fined, sentenced to parole or probation, or incarcerated in a correctional facility.

Majorities of youth who are incarcerated in juvenile correctional systems commit either serious criminal offenses or multiple status offenses (Snarr, 1987). From 1985 to 1994, the number of delinquency cases processed by juvenile courts increased by 41% (from 917,672 in 1985 to 1, 555,300 in 1994). From 1985 to 1996, juvenile cases involving offenses against persons (e.g., assault, sex offenses) increased 93%, while juvenile cases involving property offenses (e.g., robbery, car theft) increased 22%, and juvenile drug violation cases increased 62% (Office of Juvenile Justice and Delinquency Prevention, 1996). In 1994, juvenile courts nationwide processed 1.5 million index cases and 126,000 status offender cases. In 1995, public facilities held a total of 69,075 juveniles (Office of Juvenile Justice and Delinquency Prevention, 1997a), while juveniles in private residential facilities numbered 36,671 (Office of Juvenile Justice and Delinquency Prevention, 1997b).

In response to the perceived increase in violent juvenile crime, many states have enacted laws to transfer juvenile offenders who commit serious crimes (e.g., rape, armed robbery, homicide, arson) to the aegis of the adult courts and the adult correctional system (Coffey, 1998; Torbet, Gable, Hurst, Montgomery, Szymanski, & Thomas, 1996). Therefore, a youth who commits more serious crimes could be remanded to and placed in the juvenile correctional system, tried and sentenced as an adult but incarcerated in the juvenile correctional system, or tried and sentenced as an adult and incarcerated in the adult correctional system. For example, the number of juveniles transferred to adult courts increased 68% (from 7,000 to 11,000) between 1988 and 1992 (Parent, Dunworth, McDonald, & Rhodes, 1997). In 1993, there were more than 65,500 juvenile offenders in the adult correctional system out of a total prison population of one million. Thus, an increasing number of youthful offenders under the age of 22 are potentially eligible for special education services in adult correctional facilities.

As stated earlier, a large number of youth who are remanded to the juvenile or adult correctional systems will receive educational services while in custody. It is believed that many youth may have some sort of disability and should be eligible for special education services. Receiving a disability label has implications for the type of educational services they receive while in custody, after returning to public education, and when receiving services from community-based social agencies (Marder, Wechsler, & Valdes, 1993; McDaniel, 1992; Parent *et al.*, 1997).

Prevalence of Special Education Disabilities

Prevalence

Prevalence refers to how many individuals in a given population are disabled, whereas incidence refers to how often the disability occurs. Estimates vary considerably with regard to the number of youth with special education disabilities who are in the correctional system. Bullock and McArthur (1994) contend that the prevalence of special education disabilities among this population typically is 4 to 5 times greater than the rate of special education disabilities in the general population. Edgar and Hayden (1985) suggest that between 7% and 10% of all children and youth in public education can be considered to have some type of special education disability. Therefore, it follows that somewhere between 30% and 50% of youth in the correctional system have a special education disability. This extrapolation is roughly congruent with studies that estimate that between 20% and 60% of youth in juvenile and adult correctional facilities are disabled (Lewis, Schwartz, & Ianacone, 1988; Murphy, 1986; Rutherford, Nelson, & Wolford, 1985).

A recent national survey conducted by the Center for Effective Collaboration and Practice at the American Institutes for Research, in collaboration with the National Center on Education, Disability and Juvenile Justice, reveals that 37% of children and youth in state juvenile correctional facilities were disabled (Quinn, Rutherford, Wolford, Leone, & Nelson, in press). State correctional education directors or principals provided actual counts of students with disabilities in their facilities on December 1, 2000. These data represent the Child Find Census of the number of youth with disabilities reported to the State Departments of Education and, subsequently, to the U.S. Department of Education, for those correctional facilities.

The reasons for the discrepancies in disability prevalence estimates include: inconsistent definitions of disabilities; inadequate special education screening and assessment procedures available in the public schools and in correctional facilities; problems implementing special education programs in correctional settings as a result of inadequate staffing and funding for special education; and failure to obtain and/or difficulty in obtaining prior school records to determine the presence of a special education label (Leone, 1994; Leone, Rutherford, & Nelson, 1991; Rutherford *et al.*, 1985). Definitions of disabilities and "qualifications" for eligibility vary between states. The federal law sets minimum eligibility standards and states can set different, and often more inclusive, criteria for who can be served through special education. Thus, prevalence rates will differ among states.

Three pragmatic realities also may restrict the prevalence of persons with special education labels in the correctional system. First, correctional institution-based interventions are notoriously difficult to implement and/or improve and there are numerous realities that make it extremely difficult to provide effective treatment and educational services in these settings (Goldstein, 1990). Feldman, Caplinger, and Wodarski (1983) state:

> ...the factors that interfere with effective treatment in closed institutions are myriad and potent: they include severe manpower deficiencies, multiple and conflicting organizational goals, overpopulation and accompanying social problems, prisonization, the emergence of negative inmate subcultures, homogenization of inmate populations, adverse labeling and stigmatization, inadequate generalization and stabilization of desired behavior changes, and finally excessive cost in comparison with virtually all other treatment alternatives. (p.26)

Second, special education labels are given because of an individual's educational performance, based on tests and meetings that are held in school settings and in conjunction with

school personnel. School truancy and a visceral dislike of school settings is emblematic of many youth who commit criminal acts (Dryfoos, 1990). Therefore, many of these youth may not be identified and labeled by public schools for the simple reason that they seldom, or at least sporadically, attend school and complete the special education procedures necessary to receive a special education label (Bullis & Walker, 1995; Walker & Bullis, 1995).

Third, drug use has been implicated as a correlate of criminal behavior in numerous studies (e.g., Dryfoos, 1990; Elliott, Huizinga, & Menerd, 1989; Farrington & Hawkins, 1991). Such use, at an extreme, can impair judgement seriously and cause long-lasting damage to neurological and cognitive functioning (Bukstein & Van Hasslet, 1995). It may follow that (a) many youth who enter the criminal justice system will be substance users and (b) this use may affect their cognitive functioning–rendering them disabled in some way. Verification of disability status in a psychological or educational assessment, however, can be masked by the remnants of an immediate substance induced "fog" or in long-term behavioral patterns; thus, making it difficult to detect the presence of a true disability (Anglin, 1993).

The variability in identifying and labeling offenders with disabilities limits the conclusions that may be drawn from existing prevalence rates (Bullock & McArthur, 1994). In fact, because of the problems noted above, the rates reported in the professional literature may actually understate the prevalence of disabilities among incarcerated youth (Leone, 1994; Warboys, Burrell, Peters, & Ramiu, 1994). Although the full range of disabilities exists among youth placed in the correctional system, by far the most common special education conditions are specific learning disabilities, emotional disturbance, and mental retardation (Nelson, Rutherford, & Wolford, 1987; Rutherford & Wolford, 1992). We will also discuss ADD/ADHD because, although it is not a special education category, it often exists co-morbidly with learning disabilities, emotional disturbance, or mental retardation. Each of these categories are discussed below; specifically, we present definitions, prevalence data on the condition in the general population, and prevalence data on the condition among youth in the correctional system.

Specific Learning Disabilities

It has long been speculated that there is an association between learning disabilities (LD) and criminal behavior (e.g., Broder, Dunivant, Smith, & Sutton, 1981; Keilitz, & Dunivant, 1986; Lane, 1980; Larson, 1988; Zimmerman, Rich, Keilitz, & Broder, 1981). Despite this supposition, there have been ongoing controversy and confusion over the exact criteria that make someone "LD" (Kirk, 1963) and there has been considerable debate over issues of definition and terminology. Over the years, the fields of education, psychology, speech-language therapy, and medicine have contributed to a vast literature on the identification and labeling of individuals with this condition (Kavanaugh & Truss, 1988). Due to this diversity, other terms that are synonymous with learning disabilities have been coined and used in these various fields, including: minimal brain dysfunction, perceptual handicaps, congenital word blindness, developmental alexia, developmental aphasia, strephosymbolia, dyslexia, dysgraphia, and dyscalculia. Although these terms all refer to the same basic condition, the special education term "specific learning disability" (SLD) is generic and its use is widespread–even outside of special education--to refer to disorders affecting reading, mathematics, spelling, writing, listening, thinking, language, or social perception (Culbertson, 1998).

We should note, however, that within special education, controversy exists over the etiology and prevalence of students with SLD, and whether or not there is <u>really</u> any difference between many students with SLD and those students who are low-achieving academically (e.g.,

Algozzine, Ysseldyke, & McCue, 1995). This issue has critical implications for assessment and identification practices and subsequent entry into special education services, and is a point we will return to later in this document.

Definitions. The most widely used definition of LD is the one incorporated in federal Public Law 105-17, the 1997 Amendments to IDEA. This federal definition of learning disabilities has become the basis for many state definitions (Lerner, 1993).

There are two parts to the federal definition. The first part was adopted from a 1968 report to Congress of the National Advisory Committee on the Handicapped. According to the 1997 Amendments to the Individuals with Disabilities Education Act (IDEA), the term "specific learning disability" means:

> A disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage. (45 C.F.R. 121 a. 5 [b] [81 [19781).

The second or operational part of the federal definition first appeared in a separate set of regulations for children with learning disabilities (U.S. Office of Education, December 29, 1977). The regulations state that a student has a specific learning disability if (1) the student does not achieve at the proper age and ability levels in one or more of several specific areas when provided with appropriate learning experiences, and (2) the student has a severe discrepancy between achievement and intellectual ability in one or more of these seven areas: (a) oral expression, (b) listening comprehension, (c) written expression, (d) basic reading skill, (e) reading comprehension, (f) mathematics calculation, and (g) mathematics reasoning.

Although the IDEA definition is widely recognized, it is by no means accepted fully (Doris, 1993; Kavale, Forness, & Lorsbach, 1991). Hammill (1990) concluded that the National Joint Committee on Learning Disabilities (NJCLD) definition of LD has the best chance of broad acceptance by virtue of its specificity and comprehensiveness. This definition follows:

> Learning Disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perceptions, and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions (for example, sensory impairment, mental retardation, serious emotional disturbance) or with extrinsic influences (such as cultural differences, insufficient or inappropriate instruction), they are not the result of those conditions or influences. (NJCLD, 1994)

Prevalence of SLD in the general population. Currently more students in the public school system are identified as having specific learning disabilities than any other special education category. Reports from the U.S. Department of Education (1999) demonstrate that during the 1997-98 school year more than 5.4 million children, ages 6 through 21, were being served nationally through special education in the public school system. Of this number, 51.0% of the children and youth received services for SLD, compared with 19.8% who were being served for speech or language impairments, 11.2% being served for mental retardation, 8.4% being served for emotional disturbance, and 9.6% for other disabilities.

Within the general school population, students with SLD constitute anywhere from 7% to 15% of the total enrollment (Gaddes & Edgell, 1993). According to the Sixteenth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act (U.S. Department of Education, 1995), 10 percent of school-age children were identified as disabled, and over 5 percent of the total population were identified as having SLD. During the last two decades the number of students identified as SLD has increased substantially. During the 1979-80 school year, 1,281,379 students with SLD were identified in the public school system. By the 1989-90 school year the number had increased to 2,064,892 and by 1993-94 the number was 2,444,020 (Vaughn, Bos, & Schumm, 1997). Hallahan (1992) and Lerner (1993) offer several factors that may be related to these increasing numbers.

- Growing public awareness of learning disabilities. As more parents and general education teachers learn about the characteristics of students with SLD, they become more attuned to watching for signs and seeking assistance within the school system.
- Greater social acceptance. SLD are among the disabilities viewed as more socially accepted and with fewer negative connotations.
- Limited alternatives for other students at-risk of school failure. Due to limited alternatives for "at-risk" students, there may be a tendency to identify students as SLD who may be failing for reasons other than the presence of this particular disability.
- Social and cultural influences on central nervous system integrity. Demographics would suggest that more children are being born to parents whose income falls below the poverty level, who may be addicted to drugs and alcohol, and who are teenagers. These factors, in addition to the breakdown of the social services net for many families, increase the chances of these children being at risk for SLD.
- Increasing needs for literacy at work and in daily life. As we move into an information age that requires better-educated individuals, schools are demanding more of students, and higher literacy levels are necessary for jobs and the tasks of daily life.

Prevalence of SLD among persons in the correctional system. Studies on the prevalence of youth with special education disabilities in the correctional system demonstrate that there has been, and presumably still is, great variance in the prevalence of persons with SLD in the correctional system. Morgan (1979), in a survey of administrators from 204 state juvenile correctional facilities, found the overall prevalence rate of SLD to be 10.59 %. Nelson and Rutherford (1989), however, reported the percentage of SLD students in special education programs in juvenile corrections ranged from 9% to 76%. Furthermore, Casey and Keilitz (1990), in an analysis of 22 studies of the prevalence of SLD among juvenile offenders, estimated a prevalence of 35.6%. Data from the recent national survey conducted by the National Center on Education, Disability and Juvenile Justice reveal that 40% of all disabled youth in

juvenile correctional facilities have been identified as having specific learning disabilities. Students with learning disabilities represent 14.2% of the incarcerated juvenile population (Quinn et al., in press).

Emotional Disturbance

Youth who exhibit emotional and behavioral difficulties that affect their academic performance in school are referred to as having an "emotional disturbance" (ED) in the federal IDEA legislation. This label is an educational term and designation that relates primarily to academic and learning problems exhibited by a student as a consequence of his or her emotional or behavioral characteristics. Considerable debate and confusion exists within special education over the definition of ED, and the myriad of other terms used for the same disability (Cullinan, Epstein, & McLinden, 1986) (Kavale, Forness, & Alper, 1986; MacMillan & Kavale, 1986).

The definition used by the Center for Mental Health Services, which applies to children under 18, requires the presence of a diagnosable mental, behavioral, or emotional disorder of sufficient duration to meet diagnostic criteria specified within the DSM-IV, and which results is an impairment that substantially interferes with or limits the child's role or functioning in family, school, or community activities (U.S. Department of Education, 1998). The Social Security Administration's definition of eligibility for the children's Supplemental Security Income program is the presence of a mental condition that can be medically proven and that results in marked and severe functional limitations of substantial duration (U.S. Department of Education, 1998).

Outside of special education, persons who display significant emotional or behavioral disorders are referred to in a variety of ways, depending in large part on the agency that assumes the primary responsibility for service (e.g., at-risk, behaviorally disordered, emotionally handicapped, socially maladjusted, psychotic, out-of-control, antisocial). Although these labels differ, and at first glance suggest variability in people diagnosed with a disorder, there is a common theme: all subjects express emotional disturbances in aberrant or maladaptive behaviors that seriously impair their abilities to be educated, work, live, and function successfully in our society.

Youth who are adjudicated tend to exhibit more emotional and behavioral disorders than individuals who do not come under the purview of the criminal justice system (Bullis & Walker, 1995; Doren *et al*, 1996; Rutherford *et al*., 1985). Moreover, there is a disproportionately high number of adolescents and young adults who exhibit antisocial behaviors who could be--but who too seldom are--identified as having ED or some psychiatric term to define their particular pathology (Dryfoos, 1990). The fact that (a) the special education definition of ED is controversial and (b) other terms are used both within special education and different social service agencies to label what is essentially the same condition, only serves to muddle the identification process.

Definitions. Current federal legislation governing special education practices in this country (Individuals with Disabilities Education Act Amendments, 1997) defines emotional disturbance as:

> (i) The term means a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance:
>
> (A) An inability to learn which cannot be explained by intellectual, sensory, or health factors.
>
> (B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
>
> (C) Inappropriate types of behavior or feelings under normal circumstances.
>
> (D) A general pervasive mood of unhappiness or depression.
>
> (E) A tendency to develop physical symptoms or fears associated with personal or school problems.
>
> (ii) The term includes schizophrenia. The term does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance. (C.F.R. 300.7 (a) 9).

The interpretation of the federal definition of emotional disturbance differs from state to state--and even from district to district within states (Cullinan *et al.*, 1986). Consequently, problems with the definition and the label used to describe these students makes it difficult to generalize the results of empirical studies conducted in different regions, or to talk meaningfully about youth with these disorders (Kavale *et al.*, 1986).

Many professionals (e.g., Bower, 1982; Kauffman, 1989) have been critical of the definition, noting several weaknesses and inconsistencies. For example, how long must a student experience disordered behavior to be labeled as ED? What is academic performance? Does academic only refer to grades or does it include inappropriate social behavior? And, finally, what does it mean to be socially maladjusted but at the same time not ED? This last point–which has come to be called the exclusionary clause--has been particularly problematic and confusing. Kauffman (1997, p. 28) states " . . . the final addendum regarding social maladjustment is incomprehensible. A youngster cannot be socially maladjusted by any credible interpretation of the term without exhibiting one or more of the five characteristics (especially B and/or C) to a marked degree and over a long period of time."

The Council for Children with Behavioral Disorders (1987) issued a draft position statement on the provision of educational services to seriously troubled children and youth. The position paper firmly states that " . . . in the absence of defensible procedures for identifying students as 'socially maladjusted but not emotionally disturbed,' reference to the exclusion of such a subgroup should be eliminated from any revised definition. . . " (p. 16).

In line with this position on the exclusion of socially maladjusted students within this special education category, and fueled by the other controversies within the ED definition, a new definition was formulated by the National Mental Health and Special Education Coalition (Forness & Knitzer, 1992). This definition of emotional and behavioral disorder (EBD) is:

> (i)The term emotional and behavioral disorder means a disability characterized by behavioral or emotional responses in school programs so different from appropriate age, cultural, or ethnic norms that they adversely affect educational performance. Educational performance includes academic, social, vocational or personal skills. Such a disability is more than a temporary, expected response to stressful events in the environment, is consistently exhibited in two different settings, at least one of which is school-related, and persists despite individualized interventions within the educational settings, unless the education agency and the parent agree that the child or youth would not benefit from such intervention.

(ii)Emotional or behavioral disorders can co-exist with other disabilities.

(iii)This category may include children or youth with schizophrenic disorders, affective disorders, anxiety disorders or other sustained disorders of conduct or adjustment when they adversely affect educational performance in accordance with section (i).

The categorical approach to identifying who is eligible for specialized services from the educational, mental health, social services, and juvenile services systems that are mandated to serve this heterogeneous population of children and youth continues to rely on definitions specific to each service system. However, the population of troubled youth encompasses a wide range of emotional and behavioral characteristics. Behavioral characteristics may include aggressive and disruptive acting-out behaviors against family members, peers, or adults in the community, noncompliant behavior, lying, stealing, or extreme social withdrawal or depression, self-injury, or some combination of these. While some children and youth who exhibit serious social adjustment problems may have no categorical labels, others with similar behavioral characteristics may have one or more special education or Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) diagnoses.

This alternative definition has received overwhelming professional support, but has not been adopted at the federal level due to concerns over the potential increase in the numbers of students who could be (a) identified as EBD and receive special education services, and (b) afforded the safeguards from expulsion and suspension that come with that designation (National School Boards Association, 1993). Whether or not the adoption of this definition, which acknowledges that youth presenting criminal-type behaviors could and potentially should be considered as disabled under this special education category, will actually increase the numbers of students so identified, has not been borne out in states that changed their ED definition to be consistent with this alternative definition. Currently, the protections that can be offered youth with these disorders under special education law are being debated (Walker, Colvin, & Ramsey, 1995) and it is unlikely that action will be taken to adopt this definition anytime soon.

Prevalence of emotional disturbance in the general population. Estimates of the prevalence of emotional or behavioral disorders vary greatly, ranging from 0.5% to 20% or more of the school-age population (Kauffman, 1997). Kauffman (1997) contends that conservative estimates and rigorous scientific research documents report 3% to 6% of the school-aged population need specialized services because of emotional and behavioral disorders. The U.S. Department of Education (1997) reported, however, that only 0.74% of all students in U.S. schools are identified as ED.

It is clear that by comparing the prevalence estimates with the actual prevalence figures, a significant number of students with emotional and behavioral disorders who could be labeled as ED, and receive special education services, are not being identified and found eligible under this category. Brandenburg, Friedman, and Silver (1990) contend that the number of these students who receive special education services is less than one-third of those who are actually eligible to receive this assistance. Reasons for the under-identification of students with ED include (a) lack of standardized criteria as to what constitutes this disability, (b) the social stigma attached to this particular label, (c) lack of funding or appropriate services available for students with ED, and (d) limited research about the processes involved in labeling students and related placement decisions (Knitzer, Steinberg, & Fleish, 1990; National Mental Health Association, 1993).

Prevalence of ED among persons in the correctional system. While the proportion of youth with serious mental health problems is believed to be much higher in the correctional

system than in the school-aged population as a whole (Cocozza, 1992; Warboys & Wilbur, 1996), youthful offenders are significantly under-identified as ED in juvenile and adult correctional facilities. This situation most likely is due to confusion over the ED definition in the public schools and in corrections.

Even though there is no direct relationship between emotional disturbance and delinquency, a large number of delinquents and youthful offenders are diagnosed as having serious emotional disturbance. Morgan's (1979) survey of 204 correctional administrators showed that 16% of juvenile offenders in custody at that time were identified as ED. Warboys, *et al.* (1994), reported that the prevalence of emotional and behavioral disorders is 20% in the juvenile offender population. Other studies have provided varied estimates of the prevalence of emotional disturbance in juvenile offenders. Murphy (1986) reported a rate between 16% and 50%. The Quinn et al. (in press) national survey data reveal that 47% of youth with disabilities in juvenile correctional facilities have a primary diagnosis of emotional disturbance. Students with emotional disturbance represent 16.8% of the incarcerated juvenile population.

Rutherford and Wolford (1992) posit that the over-representation of youth with ED in the correctional system is due to the fact that youth who exhibit antisocial or acting-out behaviors are more likely to come into contact with the juvenile or adult criminal justice system. A number of characteristics of delinquent youth are strongly correlated with emotional disturbance. These characteristics include: substance abuse; problems in school; low verbal intelligence; family reliance on welfare or poor management of income; broken, crowded, or chaotic homes; erratic and inadequate parental supervision; and parental or sibling indifference or hostility toward the youth (Kauffman, 1997; McIntyre, 1993).

Mental Retardation

The relationship between mental retardation (MR) and criminal behavior has long been under examination (e.g., Rosen, Clark, & Kivitz, 1977). In the early nineteenth century, mental retardation was thought to be caused solely by biological factors. It was at this time that theorists tried to link mental retardation with criminality, poverty, insanity, and general moral and physical degeneration (Kauffman, 1997; Santamour, 1987). More recently, theorists have shifted their focus to the effects of environmental factors on mental retardation and have questioned whether mental retardation predisposes an individual to commit criminal acts (Santamour, 1987). Although there is no cause and effect relationship between mental retardation and delinquency, some of the social disadvantages and characteristics associated with MR may lead to increased likelihood of contact with the criminal justice system (Leone *et al.*, 1991). It is important to keep in mind that MR is not a "disease," but rather a behavioral syndrome that represents subaverage levels of intellectual functioning (Singh, Oswald, & Ellis, 1998). There is no single cause, cure, or treatment for mental retardation, and individuals with MR are not a homogeneous group. Instead, they represent a wide spectrum of abilities, clinical presentations, and behaviors, including, in some instances, delinquency or criminality (Singh *et al.*, 1998).

Definitions. The current legislation that governs special education practices in the United States, the Individuals with Disabilities Education Act, defines mental retardation as:

> "significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period, which adversely affects a child's educational performance" (45 C.F.R. 121a 5[b] [8] [19781).

Two other definitions of MR are also widely used. First, the DSM-IV sets the following criteria for mental retardation:

- Significantly subaverage intellectual functioning: an IQ of approximately 70 or below on an

individually administered IQ test (for infants, a clinical judgement of significantly subaverage intellectual functioning).

- Concurrent deficits or impairments in present adaptive functioning (i.e., the person's effectiveness in meeting the standards expected for his or her age by his or her cultural group) in at least two of the following areas: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety.
- The onset is before age 18 years (DSM IV, 1994).

This definition classifies the degree of intellectual impairment into four levels: mild, moderate, severe, or profound. Mild mental retardation includes individuals with IQs from 50-55 to approximately 70, and profound mental retardation includes individuals with IQs below 20-25 (Wood & Lazzari, 1997), with the other two levels in between.

The DSM-IV definition of mental retardation focuses on individual limitations in intellectual functioning as measured by IQ tests. More recent definitions of mental retardation, however, focus on adaptive behavior, the developmental period, and systems of support in addition to intellectual functioning. Adaptive behavior refers to "the effectiveness or degree with which individuals meet the standards of personal independence and social responsibility expected for age and cultural group" (Grossman, 1993, p.1). The developmental period refers to demonstrated limitations in intellectual functioning and adaptive behavior during an individual's developmental period, before the age of 18 (Smith & Luckasson, 1995). Finally, systems of support refer to the coordinated set of services and accommodations matched to a student's needs (Lukasson, Coulter, Polloway, Reiss, Schalock, Snell, Spitalnick, & Stark, 1992).

Because of the new emphasis in research, the most recent definition of mental retardation from the American Association on Mental Retardation states:

"Mental retardation refers to substantial limitations in present functioning. It is characterized by significantly subaverage intellectual functioning, existing concurrently with related limitations in two or more of the following applicable adaptive skill areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure and work. Mental retardation manifests before age 18" (Lukasson *et al.*, 1992 p. 1).

This definition takes into account the following four assumptions:

- Valid assessment considers cultural and linguistic diversity, as well as differences in communication and behavioral factors.
- The existence of limitations in adaptive skills occurs within the context of community environments typical of the individual's age peers and is indexed to the person's individual needs for supports.
- Specific adaptive limitations often coexist with strengths in other adaptive skills or other personal capabilities.
- With appropriate supports over a sustained period, the life functioning of the person with mental retardation will generally improve (Lukasson *et al.*, 1992, p. 5).

This AAMR definition emphasizes the level of support needed to facilitate the individual's integration into the community rather than the intellectual limitations of the individual (Meyen & Skrtic, 1995). This new definition also divides mental retardation into four levels, but unlike the DSM-IV, this classification system is based on the intensities and patterns of support needed for the individual to function, rather than on the level of intellectual functioning (Singh *et al.*, 1998). For example, support at the least intrusive level, intermittent, is

given on an as needed basis. At this level individuals can function without constant support, but may require counseling or assistance at times of crisis or during life-span transitions. The next level, the limited level, consists of more intense support characterized by regular occasional involvement and is time-limited but not intermittent in nature. In the third level, extensive, support is characterized by regular involvement in some environment, like home or work, that is not time-limited. Finally, at the pervasive level, support is consistent and intense, is provided across environments, and is potentially life-sustaining in nature.

Prevalence of MR in the general population. The prevalence of mental retardation in the general population is reported to be between 1% and 3%. Several studies, however, report differing prevalence rates depending on the definition used, the method of assessment, and the population studied. Prevalence varies further depending on the age of the population, the severity of mental retardation, and gender. For example, more individuals are identified with MR between the ages of 10 and 14 years than after adolescence. In addition, the prevalence of MR decreases as the severity increases. More individuals are diagnosed with mild mental retardation than severe or profound mental retardation. Finally, the prevalence of MR in males is greater than in females (Singh *et al.*, 1998).

Despite the new research, most published studies still define mental retardation strictly by IQ. As noted above, more recent definitions of mental retardation focus on adaptive behavior, the developmental period, and systems of support in addition to intellectual functioning. Estimates using this expanded definition report the prevalence of mental retardation to be 1.61% of the school-age population (Sikorski, 1991).

Prevalence of MR among persons in the correctional system. Offenders with mild to moderate mental retardation have historically been over-represented in the criminal justice system. Individuals with severe and profound developmental disabilities, on the other hand, are unlikely to have the opportunity to commit criminal offenses and be incarcerated and, if arrested, are rarely found in correctional facilities because they are diverted to community and residential programs (Nelson, 1987).

Santamour and West (1979) found that the prevalence of mild to moderate mental retardation in corrections was three times that found in the general population. Morgan (1979) found a similar prevalence rate of 9.5% in state correctional facilities, based on the criterion of "significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior". More recently, an analysis of the prevalence literature on juvenile offenders with disabilities found the overall weighted prevalence estimate for offenders with mental retardation to be 12.6% (Casey & Keilitz, 1990). Other studies, in which the AAMR criteria have been applied, estimate the prevalence rate of offenders with mental retardation to be between 6 and 8% of the incarcerated population (Day & Joyce, 1982; Prescott & Van Houten, 1982; Warboys *et al.*, 1994).

Recent data from the national survey of state departments of juvenile corrections and state departments of education show that 10% of youth with disabilities in state juvenile facilities have a primary diagnosis of mental retardation. These youth represent 3.4% of the incarcerated juvenile population.

The difference between the rate of MR in society as a whole versus the rate of MR in the juvenile and adult correctional system, has ignited concern in the form of legislation, standards, and greater attention to the issue, and has provided some education and treatment support for offenders with mental retardation. However, Santamour (1987) contends that the majority of individuals with MR who encounter the criminal justice system still suffer gross injustice. He

states, " . . . people with mental retardation are more likely than those without retardation to be arrested, to be convicted, to be sentenced to prison, and to be victimized in prison." (p. 106). Offenders with MR may experience disadvantages because they:

- May not understand the implications of the rights being read to them;
- May confess quickly when arrested and say what they think another person wants to hear;
- May have difficulty communicating with a lawyer and other court personnel;
- May not be recognized as mentally retarded by lawyers and other court personnel;
- Are more likely to plead guilty, are more often convicted of the arresting offense, and are less likely to plea bargain for a reduced sentence than a person without retardation;
- Are less likely to have their sentences appealed;
- Are less likely to receive pretrial psychological examinations;
- Are less frequently placed on probation or in other diversionary noninstitutional programs;
- Once in a correctional facility, are slower to adjust to the routine, have more difficulty learning regulations, and accumulate more rule infractions, thus limiting access to special programs and parole opportunities;
- Are less likely to take part in rehabilitation programs;
- Are often the recipients of practical jokes and sexual harassment in correctional institutions; and
- Are more frequently denied parole and serve longer sentences than non-retarded offenders incarcerated for the same crimes. (Santamour, 1987, p. 110-111)

Attention Deficit Hyperactivity Disorders

Over the past fifty years, a number of diagnostic labels have been given to children and youth with significant deficiencies in behavioral inhibition, sustained attention, resistance to distraction, and the regulation of activity level. Attention-Deficit/Hyperactivity Disorder (ADHD) is the term most recently used to describe this developmental disorder (Barkley, 1998). According to the DSM-IV, ADHD is characterized by two distinct factors: (1) inattention, and (2) hyperactivity-impulsivity. Students who display either or both of these characteristics can be identified as having ADHD (American Psychiatric Association, 1994). Specific criteria for this disorder include:

A. Either (1) or (2):
  (1) Six (or more) of the following symptoms of inattention have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:
  Inattention
    (a) often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities
    (b) often has difficulty sustaining attention in tasks or play activities
    (c) often does not seem to listen when spoken to directly
    (d) often does not follow through on instruction and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)
    (e) often has difficulty organizing tasks and activities
    (f) often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as schoolwork or homework)
    (g) often loses things necessary for tasks or activities (e.g., toys, school assignments, pencils, books, or tools)
    (h) is often easily distracted by extraneous stimuli

(2) six (or more) of the following symptoms of hyperactivity-impulsivity have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level:

Hyperactivity

(a) often fidgets with hands or feet or squirms in seat

(b) often leaves seat in classroom or in other situations in which remaining seated is expected

(c) often runs or climbs excessively in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)

(d) often has difficulty playing or engaging in leisure activities quietly

(e) is often "on the go" or often acts as if "driven by a motor"

(f) often talks excessively

Impulsivity

(g) often blurts out answers before the questions have been completed

(h) often has difficulty awaiting turn

(i) often interrupts or intrudes on others (e.g., butts into conversations or games)

B. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age 7 years.

C. Some impairment from the symptoms is present in two or more settings (e.g., at school [or work] and at home).

D. There must be clear evidence of clinically significant impairment in social, academic, or occupational functioning.

E. The symptoms do not occur exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia or other Psychotic Disorder, and are not better accounted for by another mental disorder (e.g., Mood Disorder, Anxiety Disorder, Dissociative Disorder, or a Personality Disorder). (American Psychiatric Association, 1994).

IDEA does not specifically include ADHD as a separate disability category, however, many students with ADHD may still qualify for special education and related services. Often times, students with ADHD have a co-occurring disability such as a learning disability or an emotional disability. If students with ADHD are having difficulty achieving and do not have a learning or emotional disability they may still qualify for special education and related services under the IDEA category of Other Health Impaired or under Section 504 of the Rehabilitation Act of 1973 and similar state regulations.

Prevalence of ADHD in the population as a whole. ADHD is one of the most common diagnoses for children and youth with behavior problems, with prevalence rates for special education or clinical samples reportedly as high as 50% to 60% (Forness, Swanson, Cantwell, Guthrie, & Sena, 1992). In contrast to this, prevalence rates in schools are usually much lower varying anywhere from 2% to 10% (Bauermeister, Canino, & Bird, 1994). Szatmari (1992) reported prevalence differences from 2% to 6.3%. Furthermore, Lambert, Sandoval, and Sassone (1978) and DuPaul (1991) found prevalence rates from 2.5% to 6.4% in elementary school-age children. Trites, Dugas, Lynch, and Ferguson (1979) reported a rate of 14.3%. In reflecting on the disparity between prevalence rates of ADHD, Barkley (1998) points out that differences across studies are probably a result of differences in: (1) the methods of selecting samples; (2) the nature of the populations themselves (urban vs rural, male vs. female, etc.); (3) the varying definitions of ADHD; and (4) the variation in ages of students. Thus, Hardman, Drew, and Egan's (1998) and Whalen and Henker's (1998) prevalence estimate of from 3% to 5% of all

school-age children having symptoms related to ADHD and ADD appears reasonable.

Prevalence of ADHD in corrections. To date, few studies have focused on special education eligibility with regard to youth with ADHD in correctional settings. The prevalence of ADHD and ADD among youthful offenders in juvenile and adult correctional facilities appears to be significantly higher than in the population as a whole. According to Davis, Bean, Schumacher, and Stringer (1991), 18.5% of randomly-selected incarcerated youth in Ohio had ADHD. Based on assessments using individual clinical interviews, Otto, Greenstein, Johnson, and Friedman (1992) identified from 19% to 46% of youth in the juvenile justice system as having attention deficit disorders. Loeber (1990) found that youth with ADHD were twice as likely to suffer from substance abuse, and had higher rates of arrest and incarceration than students without ADHD.

Comorbidity with ADHD. Learning disabilities and ADHD are probably the two most prevalent comorbid disorders. Hinshaw (1992) suggests that the comorbidity or coexistence of LD and ADHD is relatively common among adolescents with delinquent and other externalizing behavior problems. According to August and Holmes (1984) and Halperin, Gittelman, Klein, and Rudel (1984), comorbidity of these disorders ranges anywhere from a low of 10% to a high of 92% (Silver, 1981). On a more conservative note, Barkley (1990) reports a range of overlap somewhere between 19% and 26% and suggests that differences in variability are related to differences in selection criteria, sampling, measurement instruments, as well as recognized inconsistencies in the definitions for both learning disabilities and ADHD over the years.

Identification and Service Issues

The preceding sections described the current state of knowledge on the prevalence of incarcerated youth with special education disabilities and ADD/ADHD. Compared with prevalence figures in the general population, there is a disproportionate number of adults and youth with these disabilities represented in the correctional system. At the same time, there is confusion over the exact prevalence of people with disabilities in the correctional system. The authors of this study, along with others, suspect strongly that many incarcerated youth who could be identified for special education services are not. While the ethics of placing a label on these youth can be debated (e.g., Hobbs, 1975), the fact remains that access to special education services is predicated on the presence of a documented special education disability. Unless it can be shown that the student qualifies for special education services by having a co-occurring learning or emotional disability or under the category of Other Health Impaired the presence of ADD/ADHD alone may offer access to adapted instruction through guidelines presented in Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Finally, youth must often present a disability in order to receive services and support from community-based agencies (e.g., vocational rehabilitation) after release from corrections. Given these realities, the present confusion over the prevalence of youth with disabilities in the correctional system is troubling for two major reasons.

First, without a clear idea of the number of youth with disabilities in the correctional system, it may be impossible to plan administratively for ways in which special education and often social services should be structured to address the needs of these youth. Funding to special education programs is based on the number students with documented special education disabilities, and the resources available to education programs within correctional settings are based to some degree on the number of youth with special education labels. Thus, lack of knowledge regarding the prevalence of youth with disabilities is intertwined with the amount of

money that flows to these programs, funding which may spell a difference in establishing and/or maintaining needed programs and services. Further, it becomes difficult to plan effective, cohesive instructional programs in correctional facilities when it is not known how many students with special education needs are or will be present.

Second, youth with disabilities in the correctional system display very real academic limitations that demand special education and social interventions and supports. Given the serious nature of the crimes these youth commit, and their often long-term history of antisocial behaviors, it would be incorrect and an over-generalization to assert that by providing services to these youth they will all be successful in their return to community settings (McDaniel, 1992). There are validated academic, social, and vocational interventions that when offered in a comprehensive and integrated manner can have a positive, preventive effect on at least a portion of this population while they are in custody, and later when they return to the community, in order to maintain these positive behaviors (e.g., academic skills, vocational skills) over time (e.g., Kazdin, 1987; Walker & Bullis, 1995; Wolf, Braukmann, & Ramp, 1987). As a disability label is needed to access these services, failing to identify a youth with such a disability carries critical implications for service delivery in their transition back to the community.

Acknowledging the problem of disability identification in corrections is a seminal issue for instruction and service delivery, and begs the question: what can be done to address and resolve this problem? Although accurately quantifying prevalence is a critical part of this problem, prevalence is based on identification procedures and standards; thus, questions regarding prevalence rates of disabilities among youth in the correctional system cannot be answered fully without addressing identification issues and procedures. Unfortunately there are no quick and easy fixes and remediation of this particular issue is likely to entail substantial consensus building, as well as research, development, and program evaluation.

A necessary starting point in the effort to establish accurate prevalence rates is with a census of youth with disabilities who are in custody. States are required to report special education census data to the federal government on a yearly basis, but there is no parallel requirement to report these data separately for youth in special education programs in the correctional system. We are aware that some states collect and organize data of this type for their own use and accountability; however, these data are not readily accessible to a national audience, as we found in searching for resources for this monograph. It is likely that a fair portion of these data are available; therefore, the bulk of the work to establish a data set would entail yearly collecting and organizing data from states and aggregating that data for the nation. Establishing a national census of youth with disabilities who are in custody could eliminate the wide-ranging prevalence estimates we found in the literature and reported in the previous sections. Replacing estimates (Rutherford, *et al*, 1985) with actual figures should minimize difficulties in determining the resources to be allocated based on the number of youth with disabilities in custody and sharpen national plans for specific intervention initiatives to these populations. Over time, yearly census data should reflect changes and improvements in identifying youth with disabilities.

Even though such a census makes sense, the problems inherent in identifying youth for special education are legend in public education and, as we discussed earlier, become even more complicated in the correctional system. Accordingly, aggregation of these data from all states in this country may only serve to gain an initial–and perhaps incorrect–handle on the problem. To gain insights into the reasons behind the wide fluctuations in overall prevalence of youth with special education labels, and for youth in specific categories, it will be necessary to study states

in which identification and reporting procedures are known to be sound. These analyses will involve a comprehensive review of existing data sets, a description of identification and reporting procedures, and careful analysis of specific programs and structures (Yin, 1984). By establishing prevalence data for these states, it should be possible to calculate prevalence estimates–stratified by gender, setting (i.e., urban vs. rural), and ethnicity–that could be used in judging the accuracy of subsequent reporting. Documentation and specification of effective identification and reporting procedures used in those states may also prove to be useful for export and implementation to other locales.

A logical starting point for policy analysis and consensus building relates to the definitions that are used in special education for determination of eligibility. As we discussed, there are numerous problems of subjectivity and interpretation of these definitions in practice and controversy abounds on many fronts. Despite the efforts of various advocacy groups (e.g., Association on Learning Disabilities, Federation of Families for Children's Mental Health) and professional groups (e.g., Council for Children with Behavioral Disorders, American School Boards Association) to establish uniform and meaningful definitions, the glacial speed with which legislation works in responding to these types of issues have lead us to be pessimistic about concerted efforts to revise existing definitions. Having said that, it is necessary to realize that there is considerable co-morbidity among the disabilities we discussed, including co-morbidity of the special education categories with Attention Deficit Disorders, and changes should be made in the definitions used between educational and community-based social service agencies to establish common terminology and eligibility criteria. This has been addressed but not yet resolved-- to include specific learning disabilities and emotional and behavioral disorders.

One way to proceed was suggested over 20 years ago. Hallahan and Kauffman (1977) recognized the similarities among children and youth with SLD, ED, and MR and recommended considering these three categories as one condition. From an academic perspective there are more similarities than differences among these three groups and it may be pragmatically effective to consider the three conditions as being similar and grouped accordingly for instructional purposes (Deschler & Schumaker, 1986). MacMillan (1997) made a similar point, stating that in the 1960s and 1970s instruction was driven by disability status, with SLD students receiving different instruction than ED students, but that prevailing professional practices and thought no longer hold this distinction, and interventions for these three groups have become homogenized. Thus, rather than focusing on whether a youth is SLD, ED, or MR, it may be more effective and efficient to verify that they demonstrate a generalized academic deficit that requires special academic instruction and support.

A second approach would be to improve the intake and assessment process used in correctional systems, to identify youth for special education using existing definitions. If the assessment and identification process is to be improved in the correctional setting, it will be necessary to forge closer connections with the public schools. A requisite requirement of the intake process should be to forge closer connections between the public schools and the correctional system for the purposes of sharing existing assessment and educational information quickly and easily. Such sharing is notoriously difficult, and it is made even more so by regulations governing confidentiality and sharing of personal information between public agencies. Clearly, these guidelines, however well-intended, may actually impede identification and subsequent service delivery. Taking steps at the state-level to ease this exchange of information through legislation and executive order is probably the easiest way to address this

issue.

Once existing assessment and educational information is collected, the next step entails organizing and codifying these results in a manner that is useful for determining special education eligibility and for planning instructional strategies. While assessment is a critical piece of the educational process, it should use, to the maximum extent possible, existing assessment data to for efficiency (Bullis & Davis, 1999). Procedures to organize and use existing assessment data have been called for in recent school-to-work transition and mental health guidelines and is part of the Rehabilitation Amendments of 1992 (Bullis & Davis, 1999). Specifically, by organizing and using existing assessment information in the eligibility, educational, and service delivery process, valuable time is gained. The time gained by using existing data could be used to provide direct instructional and social services at the point of release from a correctional facility, which could spell the difference between success and failure in community reintegration for some youth.

Of course, the shortcomings of traditional educational and psychological assessment procedures and instruments should be noted. Individuals have been assessed for more than 100 years through "traditional" intelligence, personality, and neurological instruments and procedures (Gould, 1979). Historically, these types of assessments have been used primarily for the purposes of classifying individuals as belonging to or not belonging to specific groups (e.g., possessing a specific condition or not) or for determining the individual's eligibility for a certain program (e.g., based on this score profile the individual is eligible or not for the program), which is a core issue for this monograph. Controversy exists, however, over the relationship of assessment data from these traditional instruments to actual behaviors (e.g., what is the relationship of an IQ score to performance in a particular class or on a specific job?) (McClelland, 1973) and their instructional and/or service delivery relevance. This issue has been discussed broadly in special education (e.g., Deno, 1985), in transition and rehabilitation (e.g., Cobb, 1983; Halpern & Fuhrer, 1984), and specifically for youth with SLD (e.g., Dowdy, Smith, & Nowell, 1992; McCue, 1989), SED (e.g., Bullis, Bull, Johnson, B., & Johnson, P. 1994; Bullis, Nishioka-Evans, Fredericks, & Davis, 1993), MR (e.g., Foss, Bullis & Vilhauer, 1984), and ADHD/ADD (e.g., Maag & Reid, 1994). Essentially, what is needed is a multi-faceted assessment approach that samples and assesses critical transition (education, work, independent living, social) skills for the express purpose of guiding instruction offered in the correctional facilities and each individual's transition back into the community.

A complete description and discussion of these various assessment procedures for use in the correctional system is far beyond the scope and purpose of this monograph. The authors of this study believe, however, that these procedures–or ones similar to them–may have great utility in the correctional setting to determine eligibility and to guide and ultimately evaluate instructional interventions. Development and evaluation efforts in this area would involve (a) selection of existing instruments based on content-relevance and psychometric characteristics for use in a screening battery, (b) development of procedures to link administrative intake and placement procedures with assessment results and transfer to educational and social interventions, and (c) continuing assessment of each individual while in custody to adjust and improve intervention efforts. Perhaps no single assessment battery would be appropriate for use in all states or programs, as different settings may call for different issues to be addressed (e.g., cultural issues may predominate in some sites). However, a standard set of guidelines for choosing and operating such a system could minimize many of the problems we have discussed in this monograph.

First, a number of assessment instruments and procedures that reflect the content of both academic curricula (e.g., Deno, 1985) and transition skills (e.g., Bullis *et al.*, 1994) have been developed and are available to practitioners. These various instruments and procedures could be reviewed to identify which ones address broad content areas (e.g., vocational skills) and are both useable and embody acceptable psychometric characteristics. By establishing a recommended list of instruments, selection choices would be simplified and initial control would be gained over an important part of the assessment and identification process. Second, procedures to link assessment results directly to identification, instruction, and transition should be initiated both within correctional facilities and educational and social service programs to aid transition of youth back into the community. By relating assessment results to instructional interventions, greater impact may be demonstrated. By connecting youth to community-based educational and social agencies in advance of their return to the community, fewer youth will lack support during the transition between the facility and community. Finally, on-going assessment of youth in educational and social treatment areas should be conducted in order to adjust and improve services offered during incarceration. This type of frequent assessment is emblematic of state-of-the-art assessment procedures in both academic (Deno, 1985) and transition (Sitlington, Brolin, Clark, & Vacanti, 1985) interventions.

Prior to release from correctional facilities, post-testing should be conducted to (a) document the impact of the education and treatment services offered and completed during incarceration, (b) establish current performance levels, and (c) foster successful transition to and connection with educational placements and social services offered in community settings. This type of information should be integrated into a portfolio that would accompany the youth in their move to the community, to allow for ready access to both educational and social services. Review of these assessment results and coordinated transition-planning based on these data could then be conducted by the representatives of appropriate community-based social service agencies to insure that the youth will be connected with those services necessary to effect a successful transition back to society.

Conclusion

To alter the life trajectory of young offenders with disabilities from a path of crime, it is important that the educational and social services they receive while in custody be as powerful and relevant as possible in order to ingrain positive academic and social skills. By developing these skills, future criminal acts should be prevented to some degree and these youth will succeed at higher rates in society. As we stated at the outset of this monograph and section, assessment and identification of youth in the correctional system who have disabilities, is a seminal and important prerequisite to service delivery. Accurate identification should enable youth to receive critical instruction, and interventions that will enable them to become contributing citizens. The authors hope this monograph will provide the impetus for the work necessary to achieve this goal and that it will play some small part in the effort to improve services to this population.

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